

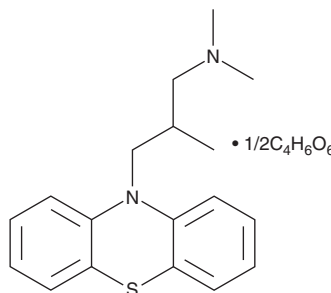
PRODUCT INFORMATION



Trimeprazine (tartrate)

Item No. 33891

CAS Registry No.: 4330-99-8
Formal Name: N,N,β-trimethyl-10H-phenothiazine-10-propanamine, 2R,3R-dihydroxybutanedioate
Synonyms: Alimemazine, NSC 17475
MF: C₁₈H₂₂N₂S • 1/2C₄H₆O₆
FW: 373.5
Purity: ≥98%
UV/Vis.: λ_{max}: 252 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Trimeprazine (tartrate) is supplied as a solid. A stock solution may be made by dissolving the trimeprazine (tartrate) in the solvent of choice, which should be purged with an inert gas. Trimeprazine (tartrate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of trimeprazine (tartrate) in ethanol is approximately 5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Description

Trimeprazine is a histamine H₁ receptor antagonist (K_i = 0.72 nM in a radioligand binding assay).¹ It is selective for the histamine H₁ receptor over muscarinic acetylcholine receptors (mAChRs; K_i = 38 nM in a radioligand binding assay). Trimeprazine inhibits anti-IgE-induced histamine release from isolated human lung fragments (IC₅₀ = 19 nM) but induces histamine release with a 50% release concentration (RC₅₀) of 1.03 μM.² It reduces severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) replication in SARS-CoV-2-infected Vero E6 cells (EC₅₀ = 1.76 μM) with a 50% cytotoxic concentration (CC₅₀) value of 19.73 μM.³ Formulations containing trimeprazine have been used in the treatment of allergic pruritis and motion sickness.

References

1. Kubo, N., Shirakawa, S., Kuno, T., *et al.* Antimuscarinic effects of antihistamines: Quantitative evaluation by receptor-binding assay. *Jpn. J. Pharmacol.* **43(3)**, 277-282 (1987).
2. Church, M.K. and Gradidge, C.F. Inhibition of histamine release from human lung *in vitro* by antihistamines and related drugs. *Br. J. Pharmacol.* **69(4)**, 663-667 (2019).
3. Yang, L., Pei, R.-J., Li, H., *et al.* Identification of SARS-CoV-2 entry inhibitors among already approved drugs. *Acta Pharmacol. Sin.* **42(8)**, 1347-1353 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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